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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/791,399 | 03/02/2004 | Marcus T. Clark | 14317 | 2571 |

7590

09/13/2006

Sally J. Brown
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3350 Airport Road
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| EXAMINER |
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MCCREARY, LEONARD

| ART UNIT | PAPER NUMBER |
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3616

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,399

Applicant(s)

CLARK ET AL.

Examiner

Leonard J. McCreary, Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 31-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/05, 6/05, 3/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 31-34 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 18 July 2006.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The phrase "is disclosed" should be deleted from line 1 of the abstract.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 6-17, and 27-29 stand rejected under 35 U.S.C. 102(b) as being anticipated by XP 007121366 to an anonymous entity, hereinafter referred to as "366."

'366 discloses a deformable diffuser for an airbag module comprising the following:

- a. An airbag inflator diffusion system, comprising: an airbag inflator having an exhaust gas exit port; and a sleeve 10 shaped to receive the inflator securely within the sleeve, the sleeve expanding radially under a force of impinging exhaust gas, the sleeve comprising a structural stop 32 to limit the radial expansion of the sleeve (fig. 4) (claim 1.)
- b. A first longitudinal edge 20 of the sleeve overlaps a second longitudinal edge 22 along a length of the sleeve (claim 4.)
- c. A perforation 70 in the sleeve becomes exposed upon radial expansion of the sleeve (claim 6.)
- d. The perforation is positioned to allow exhaust gas to flow out of the sleeve through the perforation and into an inflatable cushion (page 2, lines 27-29) (claim 7.)
- e. The perforation overlays a portion of the inflator excluding the exit port (claim 8.)
- f. The inflator is an elongate inflator and the sleeve extends a length of the elongate inflator (page 2, lines 10-13) (claims 9, 27.)
- g. The structural stop allows the sleeve to expand radially a predetermined amount (fig. 4) (claims 10, 17.)

- h. The sleeve is crimped adjacent opposing ends of the inflator to secure the inflator within the sleeve (page 2, lines 10-13) (claim 11.)
 - i. The radial expansion of the sleeve forms an exhaust passage between the sleeve and the inflator (page 2, lines 13-18) (claim 12.)
 - j. The sleeve comprises a solid section 18 positioned to receive direct impingement of the exhaust gas from the exit port and direct the exhaust gas through the exhaust passage (claim 13.)
 - k. A cross-sectional shape of the sleeve is substantially the same as a cross-sectional shape of the inflator (claims 14, 28.)
 - l. The sleeve has a mounting stud extending orthogonally therefrom (through 50, 52) (claims 15, 29.)
 - m. An airbag inflator diffuser, comprising: a sleeve 10 having a first longitudinal edge 20 that overlaps a second longitudinal edge 22 along a length of the sleeve, the sleeve expanding radially under a force of impinging exhaust gas from an exit port of an inflator when installed within the sleeve; and a structural stop 32 to limit the radial expansion of the sleeve (fig. 4) (claim 16.)
5. Claim 30 stands rejected under 35 U.S.C. 102(b) as being anticipated by JP2000211465 to Yu et al. Yu discloses an airbag device for a vehicle comprising the following:
- n. An airbag inflator diffusion system, comprising: an airbag inflator 14 having an exhaust gas exit port; and a sleeve 20 having a first longitudinal edge

22 that overlaps a second longitudinal edge along a length of the sleeve, the sleeve expanding radially to form an exhaust passage under a force of impinging exhaust gas from the exit port of the inflator installed within the sleeve, the sleeve having a perforation 23 adjacent the first longitudinal edge and a tab 28 adjacent the second longitudinal edge, such that the tab is shaped to engage the perforation upon radial expansion of the sleeve to limit expansion (figs. 1, 2) (claim 30.)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-3, 5, and 18-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over XP 007121366 to an anonymous entity in view of JP2000211465 to Yu et al. The disclosure of '366 is discussed above and further discloses:

- o. The perforation is positioned to allow exhaust gas to flow out of the sleeve through the perforation and into an inflatable cushion (claim 23).
- p. The perforation overlays a portion of the inflator excluding the exit port (claim 24).
- q. The radial expansion of the sleeve forms an exhaust passage between the sleeve and the inflator (claim 25).

r. The sleeve comprises a solid section positioned to receive direct impingement of the exhaust gas from the exit port and direct the exhaust gas through the exhaust passage (claim 26).

'366 does not teach tabs or hooks engaging perforations. Yu discloses an airbag device for a vehicle and teaches:

s. The structural stop comprises a tab 28 and a perforation 23, such that the tab is shaped to engage the perforation upon radial expansion of the sleeve to limit expansion (claims 2, 18).

t. The structural stop comprises a hook 28 and a perforation 23, such that the hook engages the perforation upon radial expansion of the sleeve to limit expansion (claims 3, 19).

u. The first longitudinal edge is slidably movable with respect to the second longitudinal edge under the force of impinging exhaust gas (figs. 1, 2) (claims 5, 21).

v. The perforation is adjacent the first longitudinal edge and the tab is adjacent the second longitudinal edge (claim 20).

w. The perforation is adjacent the first longitudinal edge and the tab is adjacent the second longitudinal edge (claim 22).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the deformable diffuser of '366 to include the tabs/hooks and perforations to create a slidably engaging structural stop as taught by Yu so as to allow disengagement of the tabs/hooks and perforations to facilitate simplified replacement of the inflator

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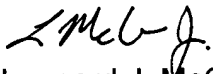
while the assembly is installed in the vehicle and the side of the diffuser cannot be accessed to slide the inflator out of the sleeve.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. McCreary, Jr. whose telephone number is 571-272-8766. The examiner can normally be reached on 0700-1700 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Leonard J. McCreary, Jr.
Examiner
Art Unit 3616


DAVID R. DUNN
PRIMARY EXAMINER